| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|---|--|
| Barcode | PHYID | Physician ID | 80000-81999='Valid range for live data collection' |
| Q3 | NUMLOC | Overall, at how many office locations (excluding hospital emergency or hospital outpatient departments) do you see ambulatory patients in a normal week? | 0-10='Valid range' -9='Blank' |
| Q5 | SETTING | At which of the settings (1-8) in Question 4, do you see the most ambulatory patients? Write the number located next to the box you checked. (For the rest of the survey, we will refer to this as the "reporting location.") | 1='Private solo/group practice' 2='Freestanding clinic/Urgent Care Center' 3='Community Health Center' 4='Mental health center' 5='Non-federal gov clinic' 6='Family planning clinic' 7='Health Maintenance Organization' 8='Faculty practice plan' -7='Not applicable' -9='Blank' |
| Q7 | PSIZECAT | How many physicians, including you, work at this practice (including physicians at the reporting location, and physicians at any other locations of the practice)? | 1='1 physician' 2='2-3 physicians' 3='4-10 physicians' 4='11-50 physicians' 5='51-100 physicians' 6='More than 100 physicians' -7='Not applicable' -9='Blank' |
| Q9 | MIDLEVP1 | How many mid-level providers (i.e., nurse practitioners, physician assistants, and nurse midwives) are associated with the reporting location? | 0-101='Valid range' -7='Not applicable' -9='Blank' |
| Q10 | MULTI1 | Is the reporting location a single- or multi-specialty (group) practice? | 1='Single' 2='Multi' -7='Not applicable' -9='Blank' |
| Q11 | ACEPTNEW | At the reporting location, are you currently accepting new patients? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q12.1 | NPRIVATE | Type of payment accepted - Private Insurance. | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|--|---|
| Q12.2 | NMEDCARE | Type of payment accepted – Medicare. | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q12.3 | NMEDCAID | Type of payment accepted - Medicaid/CHIP. | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q12.4 | NWORKCMP | Type of payment accepted - Worker's compensation. | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q12.5 | NSELFPAY | Type of payment accepted - Self-pay. | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q12.6 | NNOCHRGE | Type of payment accepted - No charge. | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q13 | IPAPHO | Is this medical organization affiliated with an Independent Practice Association (IPA) or Physician Hospital Organization (PHO)? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q14 | PCTMCAID | What percent of your patients are insured by Medicaid? | 0-100='Valid range' -7='Not applicable' -9='Blank' |
| Q15 | MCAREINS | Do you treat patients insured by Medicare? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|--|---|
| Q16 | OWNS1 | Who owns the reporting location? CHECK ONE. | 1='Physician or physician group' 2='Insurance company, health plan, or Health Maintenace Organization' 3='Community Health Center' 4='Medical / Academic health center' 5='Other hospital' 6='Other health care corporation' 7='Other' -7='Not applicable' -9='Blank' |
| Q17(1) | NPCMH | Do you or your reporting location currently participate in any of the following activities or programs? Check all that apply. Patient Centered Medical Home (PCMH) | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q17(2) | NACO | Do you or your reporting location currently participate in any of the following activities or programs? Check all that apply. Accountable Care Organization (ACO) arrangement with public or private insurers | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q17(3) | NP4P | Do you or your reporting location currently participate in any of the following activities or programs? Payfor-Performance arrangement (P4P) | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q17(4) | NMU | Do you or your reporting location currently participate in any of the following activities or programs? Medicaid EHR Incentive Program (e.g., Meaningful Use Program) | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q18(1) | MIPS | Do you participate or plan to participate in the Merit-Based Incentive Payment System? Check all that apply | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q18(2) | АРМ | Do you participate or plan to participate in the Advanced Alternative Payment Model? Check all that apply | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q18(3) | NOMIPSAPM | Do you participate or plan to participate in the Merit-Based Incentive Payment System? Check all that apply Not applicable | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|---|---|
| Q19 | EMEDREC | Does your reporting location use an EHR system? (not including billing records) | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q20.1-14 | EHRNAME | What is the name of your primary EHR system? | 1='Allscripts' 2='Amazing Charts' 3='athenahealth' 4='Cerner' 5='eClinicalWorks' 6='e-MDs' 7='Epic' 8='GE/Centricity' 9='Modernizing Medicine' 10= 'NextGen' 11='Practice Fusion' 12='Sage/Vitera/Greenway' 13='Other' 14='Unknown' -7= 'Not applicable' -9='Blank' |
| Q21 | EHRSAT | Overall, how satisfied or dissatisfied are you with your EHR system? | 1='Very satisfied' 2='Somewhat satisfied' 3="Neither satisfied nor dissatisfied" 4= 'Somewhat dissatisfied' 5= 'Very dissatisfied' -7='Not applicable' -9='Blank' |
| Q22 | HHSMU | Does your EHR system meet meaningful use criteria (certified EHR) as defined by the Department of Health and Human Services? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q23a | ESDOH | Does the reporting location use a computerized system to: record social determinants of health (e.g., employment, education)? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q23b | EBEHAV | Does the reporting location use a computerized system to: record behavioral determinants of health (e.g., tobacco use, physical activity, alcohol use)? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|---|---|
| Q23c | ECPOE | Does the reporting location use a computerized system to order prescriptions? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q23c1 | ESCRIP | If computerized orders for prescriptions are included, are prescriptions sent electronically to the pharmacy? | 1='Yes' 2='No' -8="Don't know" -7='Not applicable' -9='Blank' |
| Q23c2 | EWARN | If computerized orders for prescriptions are included, are there warnings of drug interactions or contraindications provided? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q23d | ECTOE | Does the reporting location use a computerized system to order lab tests? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q23e | ERADI | Does the reporting location use a computerized system to order radiology tests? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q23f | EREMIND | Does the reporting location use a computerized system to provide reminders for guideline-based interventions or screening tests? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q23g | ECREATERES | Does the reporting location use a computerized system to: create educational resources tailored to the patients' specific conditions? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q23h | EMSG | Does the reporting location use a computerized system to exchange secure messages with patients? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q23i | EGENLIST | Does the reporting location have a computerized system to generate lists of patients with particular health conditions? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|---|--|
| Q23j | ECCREPO | Does the reporting location use a computerized system to create reports on clinical care measures for patients with specific conditions (e.g., HbA1c for diabetics)? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q23k | ECREATEPLAN | Does the reporting location use a computerized system to create shared care plans that are available across the clinical care team? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q23I | ESENDCQM | Does the reporting location use a computerized system to send clinical quality measures to public and private insurers (e.g., blood pressure control, HbA1C, smoking status)? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q24 | TEMP | How frequently do you use template- based notes in your EHR system? | 1='Often' 2='Sometimes' 3='Rarely' 4= 'Never' -7='Not Applicable' -8="Don't know" -9='Blank' |
| Q24a | TEMPCUSTOM | To what extent do you customize your templates? | 1='A great extent' 2='Somewhat' 3='Very little or not at all' -7='Not Applicable' -8="Don't know" -9='Blank' |
| Q24b | TEMPNOTES | How easy or difficult is it to locate information in template-based notes? | 1='Very easy' 2='Somewhat easy' 3='Somewhat difficult' 4='Very difficult' -7='Not Applicable' -9='Blank' |
| Q24c | FREENOTES | How easy or difficult is it to locate information in free-text notes? | 1='Very easy' 2='Somewhat easy' 3='Somewhat difficult' 4='Very difficult' -7='Not Applicable' -9='Blank' |
| Q25 | TELEMED | Does your practice use telemedicine technology (e.g., audio with video, web videoconference) for patient visits? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|---|---|
| Q26a | EPTREC | Does your EHR system allow patients to view their online medical record? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q26b | EDLREC | Does your EHR system allow patients to download their online medical record to their personal files? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q26c | ESENDREC | Does your EHR system allow patients to send their online medical record to a third party (e.g. another provider, personal health record)? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q26d | SLFMOND | Does your EHR system allow patients to upload their health information from devices or apps (e.g. blood glucose meter, Fitbit, questionnaires)? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q27 | CSFREQ | How frequently do you prescribe controlled substances? | 1='Often' 2='Sometimes' 3='Rarely' 4= 'Never' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q28 | CSELECT | How frequently are prescriptions for controlled substances sent electronically to the pharmacy? | 1='Often' 2='Sometimes' 3='Rarely or Never' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q29 | PDMPFREQ | How frequently do you or designated staff check your state's prescription drug monitoring program (PDMP) prior to prescribing a controlled substance to a patient for the first time? | 1='Often' 2='Sometimes' 3='Rarely' 4= 'Never' -7='Not Applicable' -8="Don't know" -9='Blank' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|--|---|
| Q29a | PDMPCHECK | How do you or your designated staff check your state's PDMP? | 1='Use EHR system' 2='Use system outside of EHR (e.g., PDMP portal or secure website)' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q29b | PDMPUSE | How easy or difficult is it to use your state's PDMP to find your patient's information? | 1='Very easy' 2='Somewhat easy' 3='Somewhat difficult' 4='Very difficult' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q29c | PDMPSTATE | When checking your state's PDMP, do you or designated staff typically request to view PDMP data from other states prior to prescribing a controlled substance for the first time? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q29d(1) | PDMP1 | Have you done any of the following as a result of using the PDMP? Reduced or eliminated controlled substance prescriptions for a patient | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q29d(2) | PDMP2 | Have you done any of the following as a result of using the PDMP? Changed controlled substance prescriptions to non-opioid pharmacologic (e.g., NSAIDS or acetaminophen) or non-pharmacologic therapy (e.g., exercise/physical therapy or CBT) | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q29d(3) | PDMP3 | Have you done any of the following as a result of using the PDMP? Prescribe naloxone | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q29d(4) | PDMP4 | Have you done any of the following as a result of using the PDMP? Refer additional treatment (e.g., substance abuse treatment, psychiatric or pain management) | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q29d(5) | PDMP5 | Have you done any of the following as a result of using the PDMP? Confirm patients' misuse of prescriptions (e.g., engage in doctor shopping) | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|--|--|
| Q29d(6) | PDMP6 | Have you done any of the following as a result of using the PDMP? Confirm appropriateness of treatment | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q29d(7) | PDMP7 | Have you done any of the following as a result of using the PDMP? Assess pain and function of patient (e.g., PEG) | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q29d(8) | PDMP8 | Have you done any of the following as a result of using the PDMP? Consult with other prescribers listed in PDMP report | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q29d(9) | PDMP9 | Have you done any of the following as a result of using the PDMP? Consult and/or coordinate with other members of the care team | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q30 | METHSRPAP | Do you ONLY send <u>and</u> receive patient health information through paper-based methods including fax, eFax, or mail? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q31 | METHSEHRWEB | Do you electronically <u>send</u> patient health information to other providers outside your medical organization using an EHR (not eFax) or a Web Portal (separate from EHR)? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q32a | SEAMBOUT | Do you <u>send</u> patient health information to any of the following providers electronically? Electronically does not include scanned or PDF documents, fax, or eFax. Ambulatory care providers outside your organization | 1='Yes' 2='No' 4="Not Applicable" -7='Not applicable' -8="Don't Know" -9='Blank' |
| Q32b | SEHOSPU | Do you <u>send</u> patient health information to any of the following providers electronically? Electronically does not include scanned or PDF documents, fax, or eFax. Hospitals unaffiliated with your organization | 1='Yes' 2='No' 4="Not Applicable" -7='Not applicable' -8="Don't Know" -9='Blank' |
| Q32c | SEBHP | Do you <u>send</u> patient health information to any of the following providers electronically? Electronically does not include scanned or PDF documents, fax, or eFax. Behavioral health providers | 1='Yes' 2='No' 4="Not Applicable" -7='Not applicable' -8="Don't Know" -9='Blank' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|---|---|
| Q32d | SELTCP | Do you send patient health information to any of the following providers electronically? Electronically does not include scanned or PDF documents, fax, or eFax. Long-term care providers | 1='Yes' 2='No' 4="Not Applicable" -7='Not applicable' -8="Don't Know" -9='Blank' |
| Q33 | METHREHRWEB | Do you electronically <u>receive</u> patient health information from other providers outside your medical organization using an EHR system (not eFax) or a Web Portal (separate from EHR)? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q34a | REAMBOUT | Do you receive patient health information from the following providers electronically? Electronically does not include scanned or PDF documents, fax, or eFax. Ambulatory care providers outside your organization | 1='Yes' 2='No' 4="Not Applicable" -7='Not applicable' -8="Don't know" -9='Blank' |
| Q34b | REHOSPU | Do you receive patient health information from the following providers electronically? Electronically does not include scanned or PDF documents, fax, or eFax. Hospitals unaffiliated with your organization | 1='Yes' 2='No' 4="Not Applicable" -7='Not applicable' -8="Don't know" -9='Blank' |
| Q34c | REBHP | Do you receive patient health information from the following providers electronically? Electronically does not include scanned or PDF documents, fax, or eFax. Behavioral Health providers | 1='Yes' 2='No' 4="Not Applicable" -7='Not applicable' -8="Don't know" -9='Blank' |
| Q34d | RELTCP | Do you receive patient health information from the following providers electronically? Electronically does not include scanned or PDF documents, fax, or eFax. Long-term care providers | 1='Yes' 2='No' 4="Not Applicable" -7='Not applicable' -8="Don't know" -9='Blank' |
| Q35 | РНАРНІ | Does your reporting location electronically send or receive patient health information with public health agencies? Public health agencies can include the CDC, state or local public health authorities. | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|--|--|
| Q35a(1) | PHA1 | What types of information do you electronically send or receive? Syndromic surveillance data | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q35a(2) | PHA2 | What types of information do you electronically send or receive? Case reporting of reportable conditions | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q35a(3) | РНА3 | What types of information do you electronically send or receive? Immunization data | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q35a(4) | РНА4 | What types of information do you electronically send or receive? Public health registry data (e.g., cancer) | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q36a | HPCNOT | For providers outside your medical organization, do you regularly electronically send and receive, send only, or receive only, the following types of patient health information? Progress/consultation notes | 1='Both send and receive electronically' 2='Send electronically only' 3='Receive electronically only' 4='Do not send or receive electronically' -7='Not applicable' -9='Blank' |
| Q36b | HREF | For providers outside your medical organization, do you regularly electronically send and receive, send only, or receive only, the following types of patient health information? Clinical registry data | 1='Both send and receive electronically' 2='Send electronically only' 3='Receive electronically only' 4='Do not send or receive electronically' -7='Not applicable' -9='Blank' |
| Q36c | HEDNOT | For providers outside your medical organization, do you regularly electronically send and receive, send only, or receive only, the following types of patient health information? Emergency Department notifications | 3='Receive electronically only' 4='Do not send or receive electronically' -7='Not applicable' -9='Blank' |
| Q36d | HTOCSUM | For providers outside your medical organization, do you regularly electronically send and receive, send only, or receive only, the following types of patient health information? Summary of care records for transitions of care or referrals | 1='Both send and receive electronically' 2='Send electronically only' 3='Receive electronically only' 4='Do not send or receive electronically' -7='Not applicable' -9='Blank' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|---|---|
| Q37 | NSEARCH | When seeing a new patient or a patient who has previously seen another provider, do you electronically search or query for your patient's health information from sources outside of your medical organization? This could include via remote or view only access to other facilities' EHR or health information exchange organization. | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q37a(1) | NPCNOT | Do you electronically search for the following patient health information from sources outside your medical organization? Progress/Consultation notes | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q37a(2) | NVAX | Do you electronically search for the following patient health information from sources outside your medical organization? Vaccination/Immunization history | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q37a(3) | NCSUM | Do you electronically search for the following patient health information from sources outside your medical organization? Summary of care record | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q38 | INTPHI | Does your EHR system integrate any type of patient health information received electronically (not eFax) without special effort like manual entry or scanning? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q38a | INTCSUM | Does your EHR system integrate summary of care records received electronically (not eFax) without special effort like manual entry or scanning? | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q39a | COMPMED | Do you reconcile the following types of clinical information electronically received from providers outside your medical organization? Reconciling involves comparing a patient's information from another provider with your practice's clinical information. Medication lists | 1='Yes' 2='No' -7='Not Applicable' -8="Don't know" -9='Blank' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|---|---|
| Q39b | COMPALL | Do you reconcile the following types of clinical information electronically received from providers outside your medical organization? Reconciling involves comparing a patient's information from another provider with your practice's clinical information. Medication allergy lists | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q39c | COMPPROB | Do you reconcile the following types of clinical information electronically received from providers outside your medical organization? Reconciling involves comparing a patient's information from another provider with your practice's clinical information. Problem lists | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q40 | CINPOC | When treating patients seen by providers outside your medical organization, how often do you or your staff have clinical information from those outside encounters electronically available at the point of care? Electronically available does not include scanned or PDF documents. | 1='Often' 2='Sometimes' 3='Rarely' 4='Never' 6='I do not see patients outside my medical organization' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q41 | EUSEPHIOUT | How frequently do you <u>use</u> patient health information electronically (not eFax) received from providers or sources outside your organization when treating a patient? | 1='Often' 2='Sometimes' 3='Rarely' 4='Never' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q41a(1) | REASON1 | If rarely or never used, please indicate the reason(s) why. Check all that apply. Information not always available when needed (e.g. not timely, missing) | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q41a(2) | REASON2 | If rarely or never used, please indicate the reason(s) why. Check all that apply. Do not trust accuracy of information | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|---|--|
| Q41a(3) | REASON3 | If rarely or never used, please indicate the reason(s) why. Check all that apply. Difficult to integrate information in EHR | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q41a(4) | REASON4 | If rarely or never used, please indicate the reason(s) why. Check all that apply. Information not available to view in EHR as part of clinicians' workflow | 0='Box is not marked' 1='Box is marked' -7='Not Applicable' |
| Q41a(5) | REASON5 | If rarely or never used, please indicate the reason(s) why. Check all that apply. Information not useful (e.g. redundant or unnecessary information) | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q41a(6) | REASON6 | If rarely or never used, please indicate the reason(s) why. Check all that apply. Difficult to find necessary information | 0='Box is not marked' 1='Box is marked' -7='Not applicable' |
| Q42a | HIEQOC | Electronically exchanging clinical information with other providers outside my medical organization improves my practice's quality of care. | 1='Strongly agree' 2='Somewhat agree' 3='Somewhat disagree' 4='Strongly disagree' -7='Not applicable' -9='Blank' |
| Q42b | HIEEFF | Electronically exchanging clinical information with other providers outside my medical organization increases my practice's efficiency. | 1='Strongly agree' 2='Somewhat agree' 3='Somewhat disagree' 4='Strongly disagree' -7='Not applicable' -9='Blank' |
| Q42c | HIEPRVRXER | Electronically exchanging clinical information with other providers outside my medical organization prevents medication errors. | 1='Strongly agree' 2='Somewhat agree' 3='Somewhat disagree' 4='Strongly disagree' -7='Not applicable' -9='Blank' |
| Q42d | HIECARE | Electronically exchanging clinical information with other providers outside my medical organization enhances care coordination. | _ |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|--|--|
| Q42e | HIEDUPTEST | Electronically exchanging clinical information with other providers outside my medical organization reduces duplicate test ordering. | 1='Strongly agree' 2='Somewhat agree' 3='Somewhat disagree' 4='Strongly disagree' -7='Not applicable' -9='Blank' |
| Q43a | LACKCAP | Please indicate whether these issues are barriers to electronic information exchange with providers outside your medical organization. Providers in our referral network lack the capability to electronically exchange (e.g., no EHR system or HIE connection) | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q43b | ITSTAFF | Please indicate whether these issues are barriers to electronic information exchange with providers outside your medical organization. We have limited or no IT staff. | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q43c | HIECOSTOUT | Please indicate whether these issues are barriers to electronic information exchange with providers outside your medical organization. Electronic exchange involves incurring additional costs. | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q43d | MULPORTOUT | Please indicate whether these issues are barriers to electronic information exchange with providers outside your medical organization. Electronic exchange involves using multiple systems or portals. | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q43e | EVENDOROTH | Please indicate whether these issues are barriers to electronic information exchange with providers outside your medical organization. Electronic exchange with providers using a different EHR vendor is challenging. | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q43f | INFOHIE | Please indicate whether these issues are barriers to electronic information exchange with providers outside your medical organization. The information that is electronically exchanged is not useful. | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|---|---|
| Q43g | ELOCATADD | Please indicate whether these issues are barriers to electronic information exchange with providers outside your medical organization. It is difficult to locate the electronic address of providers. | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q43h | LOSEPAT | Please indicate whether these issues are barriers to electronic information exchange with providers outside your medical organization. My practice may lose patients to other providers if we exchange information. | 1='Yes' 2='No' -7='Not applicable' -8="Don't know" -9='Blank' |
| Q44 | TIMEOUT | On average, how many hours <u>per day</u> do you spend <u>outside of normal office</u> hours documenting clinical care in your medical record system? | 1='None' 2='Less than 1 hour' 3='1 to 2 hours' 4='Greater than 2 hours to 4 hours' 5='More than 4 hours' -7="Not applicable" -9='Blank' |
| Q45 | STAFFSUP | Do you have staff support (e.g., scribe) to assist you with documenting clinical care in your medical record system? | 1='Yes' 2='No' -7='Not applicable' -9='Blank' |
| Q46 | EASEDOC | How easy or difficult is it to document clinical care using your medical record system? | 1='Very easy' 2='Somewhat easy' 3='Somewhat difficult' 4='Very difficult' -7='Not applicable' -9='Blank' |
| Q47a | TIMEDOC | Please indicate whether you agree or disagree with the following statements about using your medical record system. The amount of time I spend documenting clinical care is appropriate | 1='Strongly agree' 2='Somewhat agree' 3='Somewhat disagree' 4='Strongly disagree' -7='Not applicable' -9='Blank' |
| Q47b | TIMEPAT | Please indicate whether you agree or disagree with the following statements about using your medical record system. The amount of time I spend documenting clinical care does not reduce the time I spend with patients. | 1='Strongly agree' 2='Somewhat agree' 3='Somewhat disagree' 4='Strongly disagree' -7='Not applicable' -9='Blank' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|--|---|
| Q47c | TIMEBILL | Please indicate whether you agree or disagree with the following statements about using your medical record system. Additional documentation required solely for billing but not clinical purposes increase the overall amount of time I spend documenting clinical care. | 1='Strongly agree' 2='Somewhat agree' 3='Somewhat disagree' 4='Strongly disagree' -7='Not applicable' -9='Blank' |
| Q48 | DOCALIGN | Clinical care documentation requirements for private insurers generally align with Medicare requirements. | 1='Strongly agree' 2='Somewhat agree' 3='Somewhat disagree' 4='Strongly disagree' -7='Not applicable' -9='Blank' |
| Q50 | WCOMPEMR | Who completed this survey? (Check all that apply) | 1='The physician to whom it was addressed' 2='Office staff' 3='Other' -9='Blank' |
| Admin box 2 | COMPTYPE | How survey was completed | 1='Mail' 2='Telephone' 3='Web' 4='Help Desk' -7='Not applicable' |
| Keyed1 | WAVECOMP | Survey was completed during which wave | 1='1st mailing' 2='2nd mailing' 3='3rd mailing' 4='Survey completed over the phone' 5='Web' 6='No data for this participant' -7='Not Applicable' |
| Derived | DISPEMR | Derived final disposition of NEHRS | 1='Complete (phone, mail, or web)' 2='Eligible-Refused' 3='Ineligible or out-of-scope' 4='Unlocatable' 5='Unknown Eligibility – Refusal' 6='Eligible – Partially Complete' 7='Unknown Eligibility – Partially Complete' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels | |
|---|---------------|---|---|--|
| RECODED AND CREATED VARIABLES | | | | |
| Recoded from SPEC | SPECR | Numeric specialty obtained from response to survey for In scope providers. Doctors of Osteopath dispersed throughout. | 01='General/Family practice' 03='Internal Medicine' 04='Pediatrics' 05='General Surgery' 06='Obstetrics & Gynecology' 07='Orthopedic Surgery' 08='Cardiovascular Diseases' 09='Dermatology' 10='Urology' 11='Psychiatry' 12='Neurology' 13='Ophthalmology' 14='Otolaryngology' 15='Other specialties' -7='Not applicable' | |
| Recoded from Physician sample file | MDDO | Type of doctor (MD/DO) as sampled | 1='MD' 2='DO' | |
| Recoded from Physician sample file | MSA | Metropolitan Status (2 categories) | 1='MSA' 2='non-MSA' | |
| Physician sample MSA. Used for weighting purposes. | SAMPLEMSA | Metropolitan Status (2 categories) | 1='MSA' 2='non-MSA' | |
| Recoded from Physician sample file | METRSTAT | Metropolitan Status (3 categories) | 1='Metropolitan' 2='Micropolitan' 3='Non-metropolitan (neither)' | |
| Recoded from SPECR & SPEC | SPECCAT | Physician specialty type obtained from response to survey | 1='Primary care specialty' 2='Surgical specialty' 3='Medical specialty' | |
| Recoded: MULTI1- LOCSIZE | MULTIR1 | Recoded practice type: solo and multiple practices - using MULTI1 and LOCSIZE. | 1='Single-specialty practice' 2='Multi-specialty practice' 3='Solo practice' -7='Not Applicable' -9='Blank' | |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---|------------------|--|--|
| Recoded from LOCSIZE | LOCSIZCAT | Size of the office with most ambulatory care patients grouped based on LOCSIZE. (Trend analysis involving grouped office size should use PRACTSIZ prior to 2013) | 1='Solo practice' 2='Two physicians' 3='3 to 5 physicians' 4='6-10 physicians' 5='11+ physicians' -9='Blank' |
| SAMPLE FILE VA | RIABLES | | |
| Physician Sample File: updated by zip if physician moved | REGION | Region of the Physician's interview office | 1='Northeast' 2='Midwest' 3='South' 4='West' |
| Physician Sample File | PHYSEX | Sex of Physician | 1='Female' 2='Male' -9='Blank' |
| Physician Sample File | SAMPWGT | Physician sample weight from State and physician selection | 1-1276='valid range' |
| Recode from PYOB | MDAGE | Physician age; grouped | 1='Under 35 years' 2='35-44 years' 3='45-54 years' 4='55-64 years' 5='65-84 years' -9='Blank' |
| Recode from PYOB | PAGE50 | Physician age; two groups | 1='Under 50 years' 2='50+ years' |
| AREA RESOURC | E FILE (ARF) VAR | IABLES | |
| ARF-Derived | ARFHHY | Median household income (2016) [F13226-16] | -9='Blank' 0-999,999='Valid range' |
| ARF-Derived | ARFPPOV | Percent where income is below poverty level(2016) [F13321-16] | 0.00-100.00='Valid range' -9='Blank' |
| ARF-Derived | ARFPWNH | Percent of population who is white, not Hispanic(2016) [F13926 & F13927-16] | 0.00-100.00='Valid range' -9='Blank' |
| ARF-Derived | ARFPMCAID | Medicaid discharges per 1000 population(2016) [F10315 & FF11984- 16] | 0.00-999.99='Valid range' -9='Blank' |
| ARF-Derived | ARFP65 | Percent of population who is 65 years and over(2016) [F14083-16] | 0.00-100.00='Valid range' -9='Blank' |

| Question number (Q#)-2018 NEHRS | Variable Name | Variable Label | Values for variable range and labels |
|---------------------------------|---------------|--|--|
| ARF-Derived | ARFPRIMARYSA | HPSA Measure: Population to FTE primary care ratio (as of May 2018) [F09787- 18] | 0='None of the county designated as shortage area' 1='Whole county designated as shortage area' 2='Part of county designated as shortage area' |
| ARF-Derived | ARFMENTALSA | HPSA Code: Population to FTE Mental Health (as of May 2018) [F12492-18] | 0='None of the county designated as shortage area' 1='Whole county designated as shortage area' 2='Part of county designated as shortage area' |
| ARF-Derived | ARFGROTOT | Percent change in total population 2007 to 2017 [F1198417&F1198407] | -999.99-998.99='Valid range' 999='Blank' |
| ARF-Derived | ARFGRO65 | Percent change in population 65+ years, 2011 to 2016 [F1408316&F1408311] | -999.99-998.99='Valid range' 999='Blank' |
| NCHS URBAN-RI | JRAL FILE | | • |
| URBAN-RURAL FILE | URBANRU | 2013 NCHS urban-rural classification based on provider zip code | 1='Large central metropolitan' 2='Large fringe metropolitan' 3='Medium metropolitan' 4='Small metropolitan' 5='Micropolitan (non- metropolitan)' 6='Noncore (non-metropolitan)' -9='Blank' |
| SUDAAN VARIAE | BLES | | • |
| Sample=PHYID | PROVIDE | Provider Code | 80000-81999='Valid range for live data collection' |
| Derived | YEAR | Survey year | 2018='Year: 2018' |
| Derived | STRAT | Stratum | 1001-4015='Valid range' |
| Derived | SUBFILE | Survey identifier | 1='NEHRS' |
| Derived | POPDOC | Estimated number of NEHRS eligible physicians | 1-999999='Valid range' |
| Derived | MAILWGT | Rounded adjusted ratio adjusted physician weight (responding physicians) | 0='Out of scope of refusing physicians' 1-999,999='Responding physicians' |